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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/552,840

01/12/2007

Joseph Steven Kelly

7077P003

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7590

03/27/2009

BLAKELY SOKOLOFF TAYLOR & ZAFMAN LLP  
1279 OAKMEAD PARKWAY  
SUNNYVALE, CA 94085-4040

EXAMINER

YOKAY, ERIN P

ART UNIT

PAPER NUMBER

3751

MAIL DATE

DELIVERY MODE

03/27/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/552,840	<b>Applicant(s)</b> KELLY, JOSEPH STEVEN	
	<b>Examiner</b> ERIN YOKAY	<b>Art Unit</b> 3751	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 11 October 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 11 October 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>10/11/2005</u> .  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Specification***

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

The following title is suggested: Ventilated Toilet Seat with Replaceable Filters.

### ***Claim Objections***

1. Claims 14-17 and 18-20 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In particular, claims 14 and 18 recite the limitations "the annular seat member", and "the central opening". There is insufficient antecedent basis for these limitations in the claim.

### ***Double Patenting***

2. Claims 1-24 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 7-15, and 28-31 of U.S. Patent Publication No. 2005/0050622 to Kelly in view of US Patent No. 5,079,783 to Haletsky and in further view of US Patent No. 6,546,567 to Kuzinar.

Regarding Claim 1, 9, 10, 14, 15, 17-20, 23, and 24, Kelly claims an annular toilet seat with ducts forming two flow paths going around the seat and an inlet for receiving foul air. Also claimed is an air filter, and a fan means that is

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arranged to the inlet and outlet aligned in a direction around the central opening. Kelly claims an inlet common to both flow paths. Kelly claims the ducts going around the 'outer' circumferential side of the seat.

Kelly fails to show an opening on the side of the toilet seat for the duct, and activated carbon for the filter. Kelly also fails to show a gas-permeable and fluid-impermeable porous support. However, Haletsky teaches an opening for the release of the treated air on the side of the seat 106, and activated carbon 108 for the filter. Haletsky also teaches a gas-permeable and fluid-impermeable porous support 160/162/164. It would be obvious to one of ordinary skill in the art to include an opening on the side of the seat of Kelly because this position would push the treated air away from the user. It would also be obvious to use activated carbon as it is a common air deodorizer. It would further be obvious to have a porous support to prevent water from ruining the filter, but allow gas through to allow the filter to function as intended.

Kelly further fails to show a filter which is removable through the side of the seat. Also lacking is an outlet for the duct, batteries, and fittings to attach the seat to the toilet. Kelly further fails to show an inlet at the rear of the seat. However, Kuzniar teaches a removable filter 50 from the side of the seat, which covers the outlet on the side of the seat. He also teaches batteries 70 in front of the duct, and seat fittings. Kuzniar teaches an inlet 30 at the rear of the seat. It would be obvious to one of ordinary skill in the art to include a removable filter from the side of the toilet because without a removable filter, the apparatus would

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go to waste when the filter is no longer usable. It is also obvious to remove it from the side because it is easier to remove the filter from the side, rather than having to open the seat to access it. It would also be obvious to have the filter cover the opening to allow the treated air to go straight from the filter, to the outlet, preventing the need for an extra duct. It would also be obvious to include the batteries to power the fans, and to place the batteries in front of the duct, because this keeps the batteries as far away from water splash as possible. It would also be obvious to include the fittings to attach the seat to the toilet seat so the seat can be functional on a toilet pan. It would be obvious to one of ordinary skill in the art to have the inlet at the rear of the seat because this allows the air to enter both air flow pathways at once.

Regarding Claims 21 and 22, it would be an obvious design choice to one of ordinary skill in the art to include an array of separate holes for either the inlet or outlet of air.

Regarding Claim 2 and 11, Kelley shows all claimed features except for a filter cartridge. However, Haletsky teaches filter cartridges 78. It would be obvious to one of ordinary skill in the art to include a filter cartridge because it protects the filters from liquid (column 5, lines 1-10).

Regarding Claim 3-6, 12, and 13, Kelly discloses all claimed features except for the filter covering the outlet and a gap that is present on all sides of the filter. Kelly also fails to disclose a filter placed directly against the wall of the seat. Kelly does not include further walls on the filter cartridge. However, Kuzniar

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teaches a filter 50 covering the outlet 51 and a gap on all sides of the filter except for the side covering the outlet, because it is placed directly against the wall of the seat. Kuzniar also discloses walls 19/34/35 on the filter cartridge 50 that create openings allowing air to enter the filter at several locations. It would be obvious to one of ordinary skill in the art to have the air entering the filter in multiple areas to use the filter to its full efficiency. The filter would be covering the outlet because it would allow the air to directly leave the filter and the seat at the same time, cutting out the need for further ducts. To allow the air to reach the filter at several locations, it would be obvious the filter would need walls with openings.

Regarding Claim 7 and 8, Kelly shows all claimed features except for a releasable catch 18, which has a tab that engages with the aperture, for retaining the filter cartridge in the opening in the seat. It would be obvious to one of ordinary skill in the art to include a releasable catch to not only hold the cartridge in, but to also provide a surface to help remove the cartridge.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-16 and 21-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,079,783 to Haletsky in view of US Patent No. 6,546,567 to Kuzinar.

Regarding Claim 1-16 and 21-23, Haletsky discloses an annular toilet seat comprising an inlet 118 for receiving foul air, two filters 100 for deodorizing the air, and a fan 82 for creating air flow. The filter includes a cartridge with ridged housing around the filter 78, which allows for the filter to be removed and replaced. The filter covers the air outlet 98. The filter cartridges also have walls that allow for airflow into the filter 78/80. There is a battery pack placed forward of the duct. The fan has an air inlet, with an air outlet opposite the inlet creating air flow through the filter. The air outlet comprises an array of separate holes. The filter comprises activated carbon. Haletsky also teaches a gas-permeable and fluid-impermeable porous support 160/162/164.

Haletsky fails to disclose an internal duct and an aperture on the side of the seat to insert the filters. He also fails to include a means for inserting and removing the cartridge, and hinge fittings for the seat to the toilet pan. However, Kuzinar teaches an inlet in the rearward side of the toilet seat leading to an internal duct 40 around the outer circumferential side of the toilet seat providing a gap around all sides of the filter except for the air outlet, placing it up against the wall of the toilet seat. Also taught is a side aperture 51 for the insertion of the filters. The filter includes a lip around the outside that acts as a releasable catch

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corresponding with the aperture of the toilet seat, which is releasable by pressing on the lip. Kuzinar also teaches hinge fittings for the toilet seat to the toilet pan. It would have been obvious to one of ordinary skill in the art to have included internal ducts in Haletsky for the toilet seat as taught by Kuzinar. The internal ducts allow for there to be one inlet away from the filters, preventing water splash on the filters. The duct and gap also allow for the foul air to have access to more parts of the filter, make the filters more efficient. Also, having the filter cover the outlet allows for the air to directly leave the toilet seat, instead of entering back into the duct system. It would have also been obvious to one of ordinary skill in the art to include tabs that allow the filter to easily be held in place and removed, which would aid in making the toilet seat filter system as user friendly as possible. It would have also been obvious to include hinge fittings because the seat has to be attached to the toilet pan or the toilet seat would fall off of the toilet pan and be nonfunctional.

Haletsky fails to show an array of separate holes in the air inlet but it would be obvious to one of ordinary skill in the art to also include these holes in the outlet, as a design choice.

5. Claims 17-20, 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 5,079,783 to Haletsky in view of US Patent No. 6,546,567 to Kuzinar and in further view of US Patent No. 4,125,906 to Weiland.



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Regarding Claim 17-20 and 24, Haletsky in view of Kuzinar discloses all claimed features except for two flow paths. However, Weiland teaches two air flow paths that go opposite each other in the ducts. It would have been obvious to one of ordinary skill in the art to have two flow paths in the ducts of Haletsky in view of Kuzinar because one flow path would be more efficient.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to ERIN YOKAY whose telephone number is (571)270-7429. The examiner can normally be reached on Monday through Thursday 7:30-5:00, Every other Friday 7:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg Huson can be reached on (571)272-4887. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EY

/Gregory L. Huson/

Supervisory Patent Examiner, Art Unit 3751